Exhibit 59

Data Analytics Subcommittee of the Race Neutral Strategies Task Force
Michael Kosorak and Patrick Curran
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The Data Analytics Subcommittee of the Race Neutral Strategies Task Force focused work efforts on two inter-related projects. First, a variety of statistical models were fit to data drawn from the application pool for UNC undergraduate admission from years 2012 through 2016 with the goal of examining the viability of race neutral alternatives in the application review process. Second, simultaneous equation models (also called path analysis) were fit to the 2015 UNC panel of the Multi-Institution Study of Leadership with the goal of estimating the potential positive student benefits of being embedded within a diverse intellectual community. Each project is briefly summarized, preliminary results are described, and future directions are delineated.

UNC Admissions Data

Initial data analytic efforts focused on the 2016 applicant pool that consisted of 33,950 completed applications. Preliminary variables of interest included biological sex, self-identified racial group membership, whether the applicant received a fee waiver, state residency, whether the applicant self-identified as a first generation college student, six separate measures of academic readiness (e.g., test scores, GPA, quality of written essay, etc.), whether the student was admitted, and whether the student ultimately enrolled. Of the total pool, 5.7% did not endorse any racial category. Of the remaining 31,984, 89.5% reported membership in a single racial category and 10.5% reported belonging to two or more racial categories. A total of 19.9% of all applicants self-identified as an under-represented minority (URM: African American, Latino/Hispanic, Native American/Hawaiian Pacific Islander). Of the 33,950 applicants, 11% requested a fee waiver, 15.5% reported being a first generation college student, and 59% were female. Finally, 28% of applicants were admitted and 12.4% enrolled.

A series of logistic regression models of varying complexity were estimated in which the full set of measured variables described above were used to predict admission status. Variables entered the model both linearly and nonlinearly with the inclusion of extensive interactions and polynomial terms. These models were then extended to use the model-building process of random forests. Numerical results were extensive. Key findings reflect that, although under-represented minority status was uniquely predictive of admission, this was just one of a large number of unique predictors (indeed, every measured variable reflected a unique prediction of admission status). Importantly, the classification accuracy in the prediction of admission status was virtually unchanged when comparing a comprehensive model that did and did not include information about applicant racial status. This reflects that under-represented minority status does not meaningfully drive the prediction accuracy of the final multivariate model.

There are three future directions to which we next turn. First, these initial models were only fitted to the 2016 data. These will be expanded to a simultaneous analysis of all five years of data to formally examine potential changes in trends over time. Second, efforts will be made to link the existing admissions data to extant data sets to provide more comprehensive information about constructs such as family income as well as student success while at UNC. Third, more advanced machine learning methods will be used to build optimal prediction models based on all available information. These models will provide an estimate of differential weights that can be applied to each variable domain in the prediction equation; once available, weights can then be fixed and adjusted to determine the subsequent impact on incoming class characteristics as a function of competing alternative selection weighting processes. Taken together, these results will provide a full and comprehensive understanding of the current applicant review and admissions process.

### Multi-Institution Study of Leadership

The second focus of the Data Analytics Subcommittee was on the analysis of data drawn from
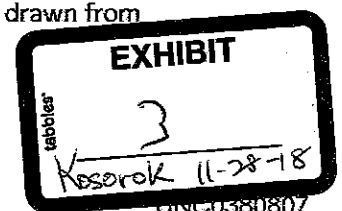
the 2015 panel of the UNC implementation of the Multi-Institution Leaders Study (MSL). The MSL is a national study examining predictors of student leadership in over 250 academic institutions. UNC has participated in the MSL since 2012. Complete survey responses were obtained from 832 UNC undergraduate students. Extensive measures were obtained from each subject covering a broad range of activities related to the undergraduate experience. Key initial variables included the following:

Construct	Original Variable Name	Recoded Variable Name
Biological Sex	DEM7	FEMALE
Year of Enrollment	DEM3.1	YEAR
Under-Represented Minority Status	DEM10a.1-DEM10a.8	URM
Belonging (sense of belonging climate)	BCLIM	BELONG
Climate (non-discriminatory climate)	DCLIM	CLIMATE
Participation (been a member in college organizations)	ENV6a	PARTIC
Diverse Interactions (socio-cultural conversations)	SOCCUL	DIVINTER
Resilience	OUTRES	RESIL
Leadership Capacity	OMNIBUS	LEADCAP
Leadership Efficacy	OUTEFF	LEADEFF
Grade Point Average	DEM13	GPA
Academic Involvement	sum(ENV4a-ENV4g)	ACADINV

A series of competing models were fit the sample data to examine potential relations among student characteristics, sense of belongingness, diverse interactions, and school success. A path diagram of one competing model is:
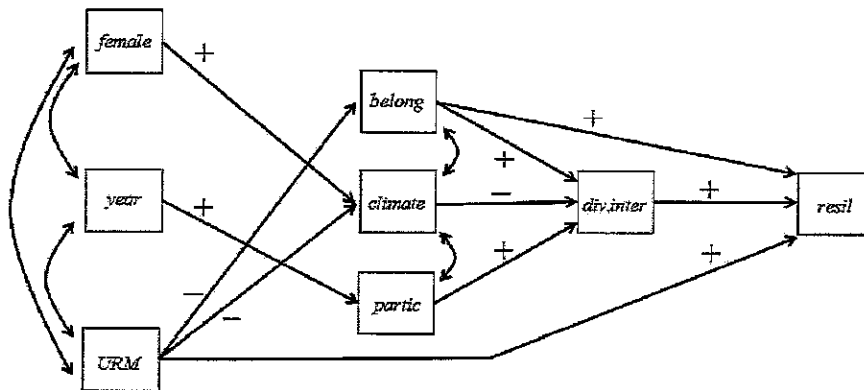
These results indicated that students who self-identify as URM have lower levels of sense of belongingness on campus and view the campus climate as more discriminatory. Higher levels of belongingness and participation in activities is associated with greater diverse interactions on campus, and this in turn is related to higher levels of academic resiliency. Interestingly, URMs report higher levels of resiliency compared to non-URMs after controlling for all other influences in the model. These preliminary results indicate that greater diverse interactions is associated with higher levels of academic resiliency, but that URMs report feeling less belonging to the campus community and to reside in an environment that is discriminatory. This is only one example of a number of competing models examining these complex multivariate relations.

The Subcommittee is pursuing three future directions in this work. First, we seek to link the MSL data to the existing admissions data so that the extensive information provided by the student when applying for admissions can be incorporated into the student experiences once on campus. Second, we will extend these analysis to include prior panels of data (dating back to 2012) to examine stability and trends in these relations over time. Finally, we will expand the models to include data from other sister institutions so we may compare and contrast the Carolina experience with that reported by other

comparison universities.